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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/215,421	12/18/1998	PAUL CHANG	16845-3	7395

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EXAMINER

SCHULTZ, WILLIAM C

ART UNIT	PAPER NUMBER
2664	13

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/215,421

Applicant(s)

CHANG ET AL.

Examiner

William C. Schultz

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7, 18, 25, 28-30 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7, 18, 25, 28-30 and 32-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4,7,18,25,28-30,32-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohammadian et al. [U.S. Pat. 6,064,721] and further in view of Kahkoska et al. [U.S. Pat. 6,002,671].

Regarding claims 28,32,7,25,40, Mohammadian et al. discloses a test set for testing a digital communications network, comprising:

at least one signal input port that connects the test set to the communications network;

(fig. 2, part 74)

line qualification test circuitry, coupled to the at least one signal input port, that performs line qualification testing on the communications network; **(fig. 8; col. 7, lines 53-56)**

an modem module that attaches removably to the test set, wherein the modem module emulates a particular type of modem, enabling the test set to test the communications network in accordance with the particular type of modem; **(fig. 1, part 12 is representation of fig. 8; col. 8, lines 8-26)**

an internal bus that couples the line qualification test circuitry and the modem module;
(fig. 2, part 58 – bus in middle of figure)

a processor, (**fig. 2, part 40**) coupled to the internal bus, that operates with the line qualification test circuitry to selectively generate line qualification test data, and with the modem module to selectively generate connectivity test data, and that selectively processes the line qualification test data and the connectivity test data, in accordance with a user selection; and (**col. 8, lines 33-37**)

a display unit, coupled to the internal bus, that selectively displays one or more of the line qualification test data and the connectivity test data in accordance with the user selection, wherein (**col. 17, lines 20-49**)

the test set stores a software program and executes selected portions of the software program as determined by the modem module emulating the particular type of modem. (**col. 16, lines 22-37**)

Mohammadian et al. fails to disclose xDSL testing. Mohammadian et al. is basically disclosive of a general communications testing unit and is meant to be useful in a wide variety of environments. (**col. 17, lines 61-65**)

Kahkoska et al. discloses adsl testing.

It would have been obvious for one skilled in the art at the time of invention to modify Mohammadian et al. with Kahkoska et al. The motivation is to provide DSL testing in a hand held testing device.

Further regarding claims 32,33,34, Mohammadian et al. fails, as noted above, to disclose xDSL testing. DSL testing requires a pair of test sets, master and slave as applicant calls them, in order to perform DSL testing. Kahkoska et al. discloses a master test set (**fig. 2, part 100**) and a slave test set. (**fig. 2, part 104**) The motivation to combine is the same as above.

Regarding claims 2,37, Kahkoska et al. discloses the line qualification includes transmission line tests, and wherein the transmission line tests includes at least one of digital multimeter tests, transmission impairment measurement set (TIMS) tests, and time domain reflection (TDR) tests. **(abstract)**

Regarding claims 3,38, Mohammadian further discloses the display unit is a graphical display unit. **(fig. 1; col. 5, lines 21-23)**

Regarding claims 4,39, Mohammadian further discloses the graphical display unit shows selected ones of the test results data in a graphical form. **(figs. 10a,b; col. 5, lines 29- 35)**

Regarding claims 18,41, Kahkoska further discloses the xDSL connectivity testing test data includes loopback testing test data. **(col. 3, lines 5-15 – a ping is a loopback)**

Mohammadian et al. discloses BERT testing. **(col. 11, lines 25-29)**

Regarding claims 29,35 Mohammadian further discloses the modem module is configured as a plug-in card. **(fig. 1)**

Regarding claims 30,36, Mohammadian further discloses the modem module includes a stored identification value, wherein the test set reads the stored identification value when the modem module is attached to the test set, and wherein the test set performs tests that relate to the stored identification value. **(col. 8, lines 56-63)**

Regarding claim 42, Kahkoska et al. further discloses the modem module determines a maximum transmission rate on the communications network based on the processed results. **(col. 3, lines 28-31)**

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

-Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Schultz whose telephone number is 703-305-2367. The examiner can normally be reached on M-F(7-4)(first bi-week) M-Th(7-4)(second bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

William Schultz
November 3, 2003



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